

# Disseminated Bullous Impetigo in an Adult With Atopic Dermatitis Flare



Fangyi Xie, MB BChir, Emma F. Johnson, MD; and Hafsa M. Cantwell, MD

A man in his mid-20s with a history of atopic dermatitis presented to the emergency department with a 1-week history of a worsening painful and pruritic generalized rash. Examination revealed erythematous erosions on the trunk and limbs with shallow bullae (Figure 1; Supplemental Figure 1, available online at <http://www.mayoclinicproceedings.org>) and absence of Nikolsky sign.

Swabs were negative for herpes simplex and varicella zoster viruses. Punch biopsy showed superficial acantholysis (Figure 2). Direct immunofluorescence was negative.

He was diagnosed with disseminated bullous impetigo and treated with cefadroxil, doxycycline, and topical corticosteroids with acetic acid wet dressings with improvement (Supplemental Figures 2 and 3, available online at <http://www.mayoclinicproceedings.org>).

Bullous impetigo is a common skin infection in children; disseminated bullous impetigo (defined as more than 10 lesions and involvement of multiple body sites) is reported in children and 1 adult with severe atopic dermatitis.<sup>1,2</sup> Shallow blisters are due to cleavage of desmoglein 1 in skin by *Staphylococcus aureus* exfoliative toxins at the site of rash, compared with sterile blisters in staphylococcal scalded skin syndrome.

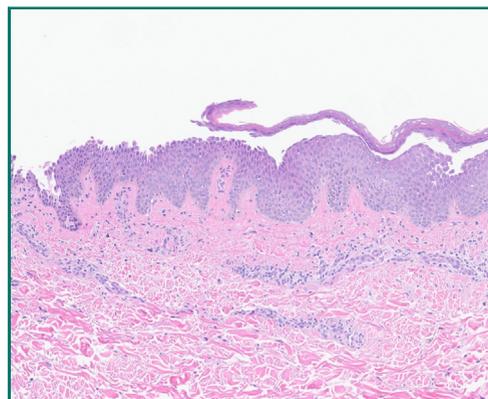
Initial misdiagnosis is common; other differential diagnoses include eczema herpeticum, atopic dermatitis flare, staphylococcal scalded skin syndrome, and autoimmune bullous disorders.<sup>1-3</sup> Clinical clues include history of atopy, lack of systemic symptoms, widespread shallow bullae and erosions, and absence of Nikolsky sign. Thorough history,



From the Department of Dermatology (F.X., E.F.J., H.M.C.) and Department of Laboratory Medicine and Pathology (E.F.J.), Mayo Clinic, Rochester, MN.



**FIGURE 1.** Widespread shallow erosions with collarettes of scale on the left side of the back with a few shallow intact bullae (left lower back) on background erythema.



**FIGURE 2.** Photomicrograph showing superficial acantholysis (hematoxylin and eosin stain, original magnification  $\times 100$ ).

examination, and bacterial and viral swabs aid in diagnosis. Skin biopsy specimens for histopathologic evaluation and direct immunofluorescence should be obtained if immunobullous conditions are considered. Oral antibiotics and treatment of underlying atopic dermatitis lead to rapid improvement. Disseminated bullous impetigo should be considered in patients with a blistering rash and a history of atopic dermatitis.

#### POTENTIAL COMPETING INTERESTS

The authors report no competing interests.

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**Correspondence:** Address to Hafsa M. Cantwell, MD, 200 First St SW, Rochester, MN 55905 ([cantwell.hafsa@mayo.edu](mailto:cantwell.hafsa@mayo.edu)).

#### ORCID

Fangyi Xie:  <https://orcid.org/0000-0001-5524-2750>

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